

CLAIMS:

1. A coding method of generating a compressed data stream with variable bit rate from digital audio and/or video signals (DIG-AV) or from audio and/or video signals (P-AV) digitized from analog signals (AN-AV), wherein the overall bit quantity/rate of the data stream does not exceed a prescribed limit, characterized in that:
- 5 - the audio and/or video signals (P-AV) are put into intermediate storage in a temporary buffer (3),
- the audio and/or video signals are analyzed in respect of the complexity of the signal waveform in order to obtain complexity information (C-INF),
- the audio and/or video signals put into intermediate storage in the temporary
- 10 buffer (3) are divided into individual segments (s1, s2 ... si),
- the audio and/or video signals (P-AV) are read, segment by segment, from the temporary buffer (3) and, with the complexity information (C-INF) assigned to them, are subjected to a compression method for signal compression which ultimately delivers a data stream (CAV) with a variable bit rate, wherein the bit rate is distributed within the segment
- 15 as a function of the complexity information and of a segment-overall-bit-quantity provided for the segment in question, and
- the data stream is stored in a memory means (6) or transmitted via a data transmission device (7).
- 20 2. A coding method as claimed in claim 1, characterized in that the temporary buffer (3) is organized as a ring buffer (3b).
3. A coding method as claimed in claim 1, characterized in that the temporary buffer (3) comprises at least two independent memory areas (3a1, 3a2) or memory units, to
- 25 which or from which audio and/or video signals (P-AV) can be written or read alternately, segment by segment.
4. A coding method as claimed in claim 1, characterized in that the audio and/or video signals stored in temporary buffer (3) are divided into segments of equal length.

5. A coding method as claimed in claim 1, characterized in that the lengths of the segments of the audio and/or video information stored in temporary buffer (3) can be altered adaptively as a function of the signal complexity.

6. A coding method as claimed in claim 1, characterized in that the audio and/or video signals are subjected to precompression before they are stored in temporary buffer (3).

7. A coding method as claimed in claim 6, characterized in that, during the precompression, the audio and/or video signals are analyzed in respect of the complexity of their signal waveforms, and the complexity information (C-INF) thereby obtained is stored, together with the audio and/or video signals (P-AV) in temporary buffer (3) for further use in the subsequent compression procedure.

8. A coding method as claimed in claim 1, characterized in that, in the event that the segment-overall-bit-quantity provided for a segment is not fully used up owing to the low complexity of the signals, the remainder is assigned to the subsequent segments.

9. A coding system for generating a compressed data stream with variable bit rate from digital audio and/or video signals (DIG-AV) or from analog (AN-AV) audio and/or video signals digitized by an analog/digital converter, wherein the overall bit quantity/rate of the data stream does not exceed a prescribed limit, characterized by:

- a temporary buffer (3) to which the audio and/or video signals (P-AV) can be written,
- an analysis means (4) for analyzing the audio and/or video signals in respect of the complexity of their waveforms, wherein complexity information (C-INF) can be generated,
- a control means (8) for dividing the audio and/or video signals stored in the temporary buffer (3) into individual segments (s1, s2 ... si),
- a compression means (5) for converting the audio and/or video signals into a compressed data stream (CAV) with a variable bit rate, wherein the audio and/or video signals can be read, segment by segment, from the temporary buffer (3) and sent, with the complexity information (C-INF) assigned to them, to the compression means (5), wherein the compression means can be controlled in such a way that the bit rate of the generated data

stream (CAV) is distributed within the segment as a function of the complexity information and of a segment-overall-bit-quantity provided for the segment in question, and

- a memory means (6) or data transmission means (7) for storing or transmitting the data stream.

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10 A coding system as claimed in claim 9, characterized in that the temporary buffer (3) is organized as a ring buffer (3b).

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11. A coding system as claimed in claim 9, characterized in that the temporary buffer (3) comprises at least two independent memory areas (3a1, 3a2) or memory units, to which or from which audio and/or video signals can be written or read alternately, segment by segment.

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12. A coding system as claimed in claim 9, characterized in that the lengths of the segments of the audio and/or video information stored in the temporary buffer can be adapted by the control means (8) as a function of the signal complexity.

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13. A coding system as claimed in claim 9, characterized by a precompression means (2) for precompressing the audio and/or video signals before they are stored in the temporary buffer.

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14. A coding system as claimed in claim 9, characterized in that it can be operated by means of computer program control, wherein a first program process controls the processing of the audio and/or video signals up to and including their storage in the temporary buffer, and a second program process, running simultaneously, controls the processing of the audio and/or video signals from their reading, segment by segment, out of the temporary buffer until the resultant data stream is stored or transmitted.

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15. A computer program product that can be loaded directly into the internal memory of a digital computer and which comprises sections of software code, wherein the steps of the coding method as claimed in claim 1 are implemented with the computer when the product is running on the computer.

16. A computer program product as claimed in claim 15, wherein the computer program product is stored on a computer-readable medium.